

ABSTRACT

A temperature sensor measures a temperature of a certain location inside a processor. An overall heat amount measurement unit measures the overall amount of heat of the processor. A temperature estimation unit estimates the temperatures of a plurality of hot spots occurring in the processor based on the temperature of the certain location detected by the temperature sensor, and determines the maximum temperature of the processor. The temperature estimation unit switches between maximum load temperature estimation coefficients and individual load temperature estimation coefficients stored in a storing unit for reference, depending on the overall amount of heat of the processor, and applies them to a temperature estimation function(s) for converting the sensor temperature into the temperatures of the hot spots. An operating frequency control unit exercises control for lowering the operating frequency of the processor when the maximum temperature of the processor estimated by the temperature estimation unit exceeds a predetermined limit temperature.